

U.S.S.N. 10/780,353

Listing of Claims

1. (currently amended) A method of controlling reaction torque transmitted through a high inertia vehicle powertrain during a rapid vehicle braking event, comprising the steps of:

detecting a rapid braking event in which a brake force is applied to at least one vehicle drive wheel produces reaction torque that is transmitted from the drive wheel through the high inertia powertrain; and,

reducing an amount of upstream of the drive wheel in the powertrain, the reaction torque produced by the applied brake force transmitted from the at least one drive wheel to a vehicle powertrain when a rapid braking event is detected ~~in step (A)~~.

2. (original) The method of claim 1, wherein the detecting step comprises sensing an application of one or more vehicle brakes.

3. (original) The method of claim 1, wherein the detecting step comprises sensing a speed of the drive wheel,

4. (currently amended) The method of claim 1, wherein the detecting step comprises sensing an operating condition of the vehicle indicating that a rapid braking event will be initiated.

5. (original) The method of claim 1, wherein the detecting step comprises sensing when an automatic braking system on the vehicle is actuated.

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6. (original) The method of claim 1, wherein the detecting step comprises sensing the application of a preselected level of torque to at least one component of the powertrain during the braking event.

7. (original) The method of claim 1, wherein the reducing step comprises disconnecting the drive wheel from the powertrain.

8. (original) The method of claim 1, wherein the detecting step comprises sensing an operating condition of the vehicle indicating a rapid deceleration of the drive wheel.

9. (original) The method of claim 1, wherein the reducing step comprises actuating a clutch.

10. (original) The method of claim 9, wherein actuating the clutch comprises allowing the clutch to slip such that only part of the torque applied to the powertrain by the drive wheel is reduced.

11. (original) The method of claim 9, wherein actuating the clutch comprises disconnecting the drive wheel from the powertrain.

12. (original) The method of 9, wherein actuating the clutch comprises disconnecting the drive wheel from a portion of the powertrain.

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13. (original) The method of claim 7, further comprising the step of reconnecting the drive wheel to the powertrain after the braking event is ended.

14. (original) The method of 13, wherein reconnecting the drive wheel comprises:

comparing a speed of the drive wheel with a speed of the powertrain,

adjusting the speed of the powertrain to a preselected range based in part on the drive wheel speed.